# Hominy Ridge Lake Wabash County 2007 Fish Management Report

## Rod A. Edgell Assistant Biologist



Fisheries Section
Indiana Department of Natural Resources
Division of Fish and Wildlife
I.G.C.-South, Room W273
402 W. Washington Street
Indianapolis, IN 46204

#### **EXECUTIVE SUMMARY**

- Hominy Ridge Lake is an 11-acre impoundment located within the Salamonie River State Forest in Wabash County. Picnic, playground, and restroom facilities, along with the lakes proximity to Marion, Wabash, and Huntington promote high public use of this resource.
- In 1986 120 triploid grass carp were stocked into Hominy Ridge Lake. Additional triploid grass carp were stocked in 1993, 2002, and 2004 at a stocking rate of 5 per acre. A property rule implementing a minimum size limit of 7 in and a bag limit of 15 for bluegills was applied in 2003.
- The general survey of Hominy Ridge Lake was conducted from June 18 to June 19, 2007. Temperature and an oxygen profile were collected at the deepest point using a Hydrolab Quanta®. Submersed aquatic plants were sampled on August 29, 2007 according to the Tier II Aquatic Vegetation Survey Protocol (IDNR 2007).
- Fish collection effort consisted of 0.5 h of pulsed D.C. night electrofishing with two dippers. Two trap nets and two experimental gill nets were set overnight (Figure 1). Total length of all fish was measured to the nearest 0.1 in and weight was measured to the nearest 0.01 lbs.
- Submersed plants were recorded at a maximum depth of 12 ft, in August of 2007. A total of two species were collected. Coontail was most common (frequency = 95%), followed by sago pondweed (frequency = 5%).
- A total of 598 fish, weighing 109.6 lbs was collected during this survey. Bluegills were the most abundant fish collected by number (60%), followed by largemouth bass (17%), and redear sunfish (16%).
- A total of 360 bluegills, ranging in total length from 1.1 to 7.7 in was collected at Hominy Ridge Lake.
- A total of 100 largemouth bass was collected at Hominy Ridge Lake. Total length of bass collected ranged from 3.7 to 15.8 in, and included only two fish over the 14 in minimum size limit.
- A total of 93 redear sunfish, ranging in total length from 2.4 to 7.8 in was collected.
- An overabundance of vegetation continues to limit the potential of the fishery at Hominy Ridge Lake. The dense vegetation is likely limiting the foraging efficiency of largemouth bass on bluegill. This lack of predation is responsible for the slow growth of both species, and is limiting the potential for larger individuals.
- Although few large individuals are present, Hominy Ridge Lake is currently providing
  angling opportunities for several species. The location of the lake and the nearby facilities
  make this lake a good spot for family gatherings.

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#### INTRODUCTION

Hominy Ridge Lake is an 11-acre impoundment located within the Salamonie River State Forest in Wabash County. Picnic, playground, and restroom facilities, along with the lakes proximity to Marion, Wabash, and Huntington promote high public use of this resource. Maximum depth is 17 ft and average depth is 6 ft. Due to the lakes shallow nature aquatic vegetation is very abundant. The boat ramp is located on the east end of the lake, and only trolling motors are allowed.

The lake was treated with rotenone to remove abundant bullheads and carp in 1981 and was restocked with largemouth bass, bluegill, redear sunfish, and channel catfish. Channel catfish continue to be stocked during alternating years. In 1986 Hominy Ridge Lake was selected as one of eight impoundments for a research project to evaluate the effectiveness of triploid grass carp in controlling aquatic vegetation (Braun 1991). In 1986 120 triploid grass carp were stocked into Hominy Ridge Lake. Additional triploid grass carp were stocked in 1993, 2002, and 2004 at a stocking rate of 5 per acre. A property rule implementing a minimum size limit of 7 in and a bag limit of 15 for bluegills was applied in 2003.

#### **METHODS**

The general survey of Hominy Ridge Lake was conducted from June 18 to June 19, 2007. Temperature and an oxygen profile were collected at the deepest point using a Hydrolab Quanta®. Submersed aquatic plants were sampled on August 29, 2007 according to the Tier II Aquatic Vegetation Survey Protocol (IDNR 2007). A global positioning system device was used to record the location of submersed aquatic vegetation sampling locations.

Fish collection effort consisted of 0.5 h of pulsed D.C. night electrofishing with two dippers. Two trap nets and two experimental gill nets were set overnight (Figure 1). Total length of all fish was measured to the nearest 0.1 in and weight was measured to the nearest 0.01 lbs. Five scale samples per half-inch group were collected from bluegill, largemouth bass, redear sunfish, and black crappie for age determination and back-calculated lengths-at-age. Length frequency distribution for reporting purposes will be grouped in half-inch groups which are defined as X.0 - X.4 and X.5 - X.9. Age length keys were also constructed to determine mean length at age. Proportional stock density (PSD) was calculated for bluegills, largemouth bass, and redear sunfish using electrofishing catch only (Anderson and Neumann 1996).

#### **RESULTS**

On June 18 the water temperature was 79.4°F at the surface and a dissolved oxygen concentration greater than 3.0 ppm was present down to a depth of 8 ft. Submersed plants were recorded at a maximum depth of 12 ft, in August of 2007. A total of two species were collected. Coontail was most common (frequency = 95%), followed by sago pondweed (frequency = 5%). Species that were not collected in 2007, but were present in 2002 include: slender naiad, curly-leaf pondweed, Chara sp., southern naiad, American pondweed, and leafy pondweed (Braun 2004). Eurasian watermilfoil is currently not present in Hominy Ridge Lake.

A total of 598 fish, weighing 109.6 lbs was collected during this survey. Bluegills were the most abundant fish collected by number (60%), followed by largemouth bass (17%), and redear sunfish (16%). Largemouth bass were the most abundant collected by weight (41%), followed by bluegill (17%), and common carp (14%). This was the first time common carp were collected since the renovation in 1981 (Table 1).

A total of 360 bluegills, ranging in total length from 1.1 to 7.7 in was collected at Hominy Ridge Lake. The electrofishing, gill net, and trap net catch rates were 352 fish/h, 3 fish/lift, and 90 fish/lift, respectively. The PSD for bluegill was 18, and no preferred size (8 in) bluegills were collected. Bluegills of quality size (6 in or greater) comprised 14% of the sample, while bluegills of this size comprised 13% and 6% of the sample during population estimates in 2001 and 2002, respectively. Growth of bluegills was much slower in 2007 compared to past surveys (Table 2). Based on an age length key and back calculated lengths at age the majority of bluegills reach 6 in between ages 4 - 5.

A total of 100 largemouth bass was collected at Hominy Ridge Lake. The electrofishing, gill net, and trap net catch rates were 180 fish/h, 4 fish/lift, and 1 fish/lift, respectively. Total length of bass collected ranged from 3.7 to 15.8 in, and included only two fish over the 14 in minimum size limit. The PSD for largemouth bass during this survey was 52. Of the largemouth bass collected 2% were greater than or equal to 14 in. Largemouth bass of this size comprised 3% and 4% of the sample during population estimates in 2001 and 2002, respectively. Based on an age length key and back calculated lengths at age the majority of largemouth bass reach 12 in between ages 4 - 5.

A total of 93 redear sunfish, ranging in total length from 2.4 to 7.8 in was collected. The electrofishing, gill net, and trap net catch rates were 30 fish/h, 1 fish/lift, and 39 fish/lift,

respectively. The PSD for redear sunfish was 17, and no preferred size (9 in) redear were collected. Of the redear collected 22% were equal to or greater than 7 in. Redear of this size comprised 14% and 19% of the sample during population estimates in 2001 and 2002, respectively. Based on an age length key and back calculated lengths at age the majority of redear sunfish reach 7 in between ages 4 - 5.

A total of 35 black crappie, ranging in total length from 7.1 to 13.3 in was collected. The electrofishing, gill net, and trap net catch rates were 2 fish/h, 2 fish/lift, and 15 fish/lift, respectively. Based on an age length key and back calculated lengths at age the majority of black crappie reach 8 in by age 3.

A total of 6 channel catfish, ranging in total length from 11.5 to 15.5 in was collected. The electrofishing, gill net, and trap net catch rates were 4 fish/h, 2 fish/lift, and 1 fish/lift, respectively.

#### DISCUSSION

An overabundance of vegetation continues to limit the potential of the fishery at Hominy Ridge Lake. The dense vegetation is likely limiting the foraging efficiency of largemouth bass on bluegill. This lack of predation is responsible for the slow growth of both species, and is limiting the potential for larger individuals. The current triploid grass carp population appears to be selectively feeding on pondweeds and naiads, and have been ineffective at reducing the overabundance of coontail at Hominy Ridge Lake. Good control of vegetation by grass carp was documented at Hominy Ridge from 1989 through the early 1990's (Braun 1991, Braun 1992, Braun 1994). Over this time period bluegill growth rates appeared to respond positively from this reduction (Table 2).

The harvest restrictions implemented in 2003 have had no impact on the bluegill population, and the fishery continues to be dominated by bluegill less than or equal to 6 in. Bluegill growth continues to be slow and has decreased since the regulation change. However due to the overabundance of vegetation it is difficult to determine if the harvest restrictions are responsible for this decline. Unless growth of bluegill improves this regulation is not likely to improve the quality of the bluegill fishery.

Although few large individuals are present, Hominy Ridge Lake is currently providing angling opportunities for several species. The location of the lake and the nearby facilities make this lake a good spot for family gatherings.

#### RECOMMENDATIONS

- A reduction in the abundance of submersed vegetation is needed at Hominy Ridge Lake. Triploid grass carp are currently present in the lake, but the population is too low to substantially reduce the amount of aquatic vegetation. A cooperative decision by Fisheries District 4 and Salamonie Reservoir staff will be made to either stock triploid grass carp or chemically treat Hominy Ridge Lake.
- Channel catfish should continue to be stocked every other year.

#### LITERATURE CITED

- Anderson, R. O., and R. M. Neumann. 1996. Length, weight, and associated structural indices. Pages 447-481 *in* B. R. Murphy and D. W. Willis, editors. Fisheries techniques, 2<sup>nd</sup> edition. American Fisheries Society, Bethesda, Maryland.
- Braun, E. R. 1991. Relative effectiveness of triploid grass carp in controlling aquatic vegetation in two impoundments, 1990 completion Report. Indiana Department of Natural Resources, Indianapolis, Indiana.
- Braun, E. R. 1992. Hominy Ridge Lake Wabash County, fish management report 1992. Indiana Department of Natural Resources, Indianapolis, Indiana.
- Braun, E. R. 1994. Hominy Ridge Lake Wabash County, fish management report 1994. Indiana Department of Natural Resources, Indianapolis, Indiana.
- Braun, E. R. 2004. Impact of panfish harvest restrictions on the fishery of a small impoundment, 2001-2002 progress report WP#200269. Indiana Department of Natural Resources, Indianapolis, Indiana.
- Indiana Department of Natural Resources. 2007. Tier II Aquatic Vegetation Survey Protocol. Indianapolis, Indiana.

Submitted by: Rod A Edgell, Assistant Fisheries Biologist Date: March 26, 2008

Approved by: Edward Braun, Fisheries Biologist Date: March 27, 2008

Approved by: Stuart Shipman, Regional Supervisor Date: April 8, 2008

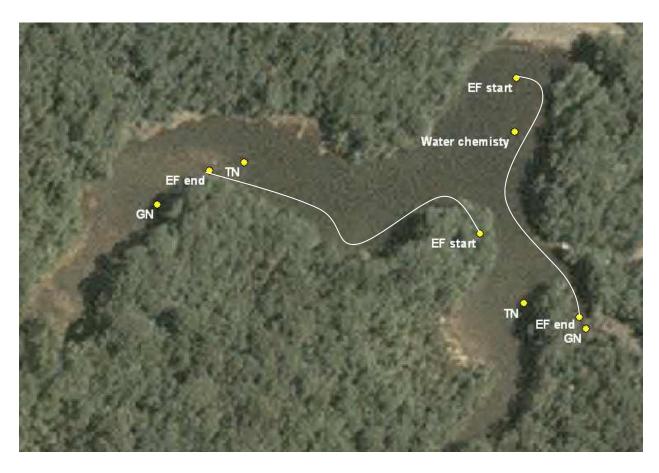


Figure 1. Sampling gear locations at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

Table 1. Abundance of fish collected during general surveys conducted at Hominy Ridge Lake from 1983 through 2007.

2007.									
Species	1983	1984	1987	1988	1989	1992	1994	1998	2007
Bluegill	39	207	323	287	365	293	249	563	360
Largemouth bass	358	126	270	201	298	154	123	128	100
Redear sunfish	73	58	125	51	199	52	52	83	93
Black crappie				2	8				35
Channel catfish	1	28	47	28	30	34	26	19	6
Black bullhead	1				1			11	1
Brown bullhead			1				2		1
Common carp									1
Hybrid sunfish						1			1
Grass carp				2	3	2		1	
Green sunfish		6							
Spotfin shiner								1	
Walleye				1	1				
White bass		1							
White crappie			1	6		2	2	10	
White sucker			1						
Total	472	425	766	578	905	538	454	816	598
Electrofishing Effort (h)	0.67	0.71	0.67	0.73	0.78	0.75	0.86	0.98	0.5
# of Gill Nets Lifts	0	6	6	6	6	6	3	6	2
# of Trap Net Lifts	3	6	6	6	6	6	3	6	2

Table 2. Back calculated lengths at age of bluegills collected at Hominy Ridge Lake from 1988 to 2007.

		6	6 6					
Year	N	Age - 2	N	Age - 3	N	Age - 4	N	Age - 5
2007	11	2.7	10	3.3	13	4.9	16	5.6
2002	22	2.2	50	3.8	25	5.9	15	6.6
2001	32	2.4	28	4.1	28	5.7	20	6.2
1998	25	2.2	30	3.4	37	5.2	17	6.6
1994	16	2.8	37	4.7	23	6.5	7	6.9
1992	32	3.5	23	5.0	21	6.1	6	7.0
1990	16	2.2	27	3.5	24	5.2	9	6.0
1989	18	2.7	36	4.1	17	5.7	10	6.5
1988	21	2.9	15	4.0	18	5.0	13	5.7

Appendix

LAKE SURVEY REPORT		Type of Survey	nitial Sur	vey	<b>X</b> Re-Surv	Re-Survey			
Lake Name		County			Date of surv	ey (Month, day, year)			
Hominy Ridge Lake		Wabash				6/18/07-6/19/07			
Biologist's name Rod A Edgell					Date of surv	ey (Month, day, year)			
tod /t Lagon					1				
Overden als Name		LOCATIO	<u>N</u>		Oti				
Quadrangle Name		Range	7E		Section	12			
Lagro Township Name		Nearest Town	/ [			12			
27N		Lagro							
		ACCESSIBIL	ITY						
State owned public access site		Privately owner		access site	Other ac	ccess site			
One improved ram									
Surface acres Maximum depth Average depth		Acre feet		Water level		Extreme fluctuations			
11 17 17 Location of benchmark		66			752	1 ft			
None									
		INLETS							
Name	Location	INLEIS		Origin					
Unnamed ditch	Southwest	Runoff							
-									
		OUT! FT							
Name	Location	OUTLETS	<u> </u>						
Unnamed ditch	North to Salamo	onie River							
Water level control									
Earthen dam with concrete drop box		Foot MCL \		ACDEC	1	5.4			
POOL	ELEVATION (	reet WSL)		ACRES	_	Bottom type Boulder			
TOP OF DAM						<b>—</b>			
TOP OF FLOOD CONTROL POOL						X Gravel			
TOP OF CONSERVATION POOL						x Sand			
TOP OF MINIMUM POOL						Muck			
STREAMBED						X Clay			
						Marl			
Watershed use									
Salamonie State Forest									
Development of shoreline									
Undeveloped									
Previous surveys and investigations									
General Survey (IDNR) 1962, 1965	. 1966, 1968. 197	'2, 1975. 197	8, 1979	9, 1980. 198	2, 1983. 19	84, 1992, 1994.			
						20.70) (12.111) 1070.			
and 1998. LMB, BLG, RES populat Angler creel sruvey (IDNR) 2001 an						survey (IDNR)			

	SAMPLING EFFORT										
ELECTROFISHING				Night hours		Total hours					
ELECTROPISHING					0.5	0.5					
TRAP NETS	Number of traps			Number of Lifts		Total effort					
	2				1	2					
GILL NETS	Number of nets			Number of Lifts		Total effort					
GILL NETS		2			1	2					
ROTENONE	Gallons	ppm	Acı	re Feet Treated	SHORELINE	Number of 100 Foot Seine Hauls					
					SEINING						

	PHYSICAL AND CHEMICAL CHARACTERISTICS									
Color		Turbidity					Air temperature:			
	Green		7 Feet	;	5 Inches (SECCHI DISK)		All temperature.	'		
	Water chemistry GPS coo	rdinates:	<sup>62 N</sup> 40.8	80858171		W	-85.68409511			

					WAT	ER QU	ALITY F	PARAME	ETERS						
DEPTH (Feet)	Degrees (F)	D.O.	SpC	рН	TDS	D.O.%	Turb.	DEPTH	Degrees (F)	D.O.	SpC	pН	TDS	D.O.%	Turb.
SURFACE	79.48	8.05	0.278	8.39	0.2	103	34.6	52							
2	79.5	8.04	0.278	8.37	0.2	102.9	32.8	54							
4	79.44	8.03	0.278	8.35	0.2	102.7	31.9	56							
6	79.45	12.06	0.279	8.73	0.2	148.2	48.9	58							
8	68.23	11.03	0.295	8.34	0.2	125.1	61.4	60							
10	61.38	2.73	0.311	7.08	0.2	28.7	50.7	62							
12	54.75	1.6	0.317	6.96	0.2	15.4	66.8	64							
14	49.6	0.79	0.362	6.76	0.2	7.3	78.9	66							
14.4	49.41	0.55	0.367	6.78	0.2	5	5999	68							
18								70							
20								72							
22								74							
24								76							
26								78							
28								80							
30								82							
32								84							
34								86							
36								88							
38								90							
40								92							
42								94							
44								96							
46								98							
48								100							
50															
						C	OMME	NTS							

## Occurrence and Abundance of Submersed Aquatic Plants - Overall

Lake: Hominy Ridge Secchi(ft): 9.0 SE Mean species / site: 0.07

Date: 8/29/2007 Littoral sites with plants: 19 Mean natives / site: 1.00

Littoral Depth (ft): 12.0 Number of species: 2 SE Mean natives / site: 0.07

Littoral Sites: 19 Maximum species / site: 2 Species diversity: 0.10

Total Sites: 20 Mean species / site: 1.00 Native diversity: 0.10

	Frequency of					
Species	Occurrence	0	1	3	5	Dominance
Coontail	95.0	5.0	15.0	5.0	75.0	81.0
Sago Pondweed	5.0	95.0	5.0	0.0	0.0	1.0
Filamentous Algae	45.0					

Other species noted:

## Occurrence and Abundance of Submersed Aquatic Plants - 0 to 5 ft.

Lake: Hominy Ridge Secchi(ft): 9.0 SE Mean species / site: 0.10
Date: 8/29/2007 Littoral sites with plants: 10 Mean natives / site: 1.10
Littoral Depth (ft): 12.0 Number of species: 2 SE Mean natives / site: 0.10
Littoral Sites: 10 Maximum species / site: 2 Species diversity: 0.17
Total Sites: 10 Mean species / site: 1.10 Native diversity: 0.17

	Frequency of					
Species	Occurrence	0	1	3	5	Dominance
Coontail	100.0	0.0	20.0	0.0	80.0	84.0
Sago Pondweed	10.0	90.0	10.0	0.0	0.0	2.0
Filamentous Algae	70.0					

Other species noted:

Occurrence and Abundance of Submersed Aquatic Plants - 5 to 10 ft.

Lake: Hominy Ridge
Date: 8/29/2007
Littoral sites with plants: 7
Mean natives / site: 0.00

Littoral Depth (ft): 12.0
Number of species: 1
Se Mean species / site: 1.00

SE Mean natives / site: 1.00

Native diversity: 0.00

Native diversity: 0.00

Frequency of Score Frequency

 Species
 Occurrence
 0
 1
 3
 5
 Dominance

 Coontail
 100.0
 0.0
 0.0
 100.0
 100.0
 100.0

Filamentous Algae 28.6

Other species noted:

Occurrence and Abundance of Submersed Aquatic Plants - 10 to 15 ft.

Lake: Hominy Ridge Secchi(ft): 9.0 SE Mean species / site: 0.33

Date: 8/29/2007 Littoral sites with plants: 2 Mean natives / site: 0.67

Littoral Depth (ft): 12.0 Number of species: 1 SE Mean natives / site: 0.33

Littoral Sites: 2 Maximum species / site: 1 Species diversity: 0.00

Total Sites: 3 Mean species / site: 0.67 Native diversity: 0.00

Species Occurrence 0 1 3 5 Dominance
Coontail 66.7 33.3 33.3 33.3 0.0 26.7

Filamentous Algae 0.0

Other species noted:

SPECIES AND RELATIVE A	BUNDANCE OF	FISHES COLLE	ECTED BY NUMBE	R AND WEIGHT	Γ
*COMMON NAME OF FISH	NUMBER	PERCENT	LENGTH RANGE (inches)	WEIGHT (pounds)	PERCENT
Bluegill	360	60.2	1.1-7.7	18.27	16.7
Largemouth bass	100	16.7	3.7-15.8	44.69	40.8
Redear sunfish	93	15.6	2.4-7.8	12.65	11.5
Black crappie	35	5.9	7.1-13.3	12.04	11.0
Channel catfish	6	1.0	11.5-15.5	4.62	4.2
Common carp	1	0.2	30.6	15.25	13.9
Black bullhead	1	0.2	12.4	1.27	1.2
Brown bullhead	1	0.2	10.5	0.57	0.5
Hybrid sunfish	1	0.2	7.0	0.27	0.2
Total (9 Species)	598	100.0		109.63	100.0

<sup>\*</sup>Common names of fishes recognized by the American Fisheries Society.

Lake:	Hominy Ridge	)			TN	GN	EF	
Date:	6/18/2007	to	6/19/2007	Total #	179	5	176	
Species:	Bluegill			Effort	2	2	0.5	
Total number:	360			CPUE	90	3	352	
Total weight:	18.27							
Length range:	1.1	to	7.7					

Group	TL (in)	TN	GN	EF	TOTAL	RSD
Stock	3	115	5	73	193	-
Quality	6	37	2	13	52	18
Preferred	8	0	0	0	0	
Memorable	10	0	0	0	0	
Trophy	12	0	0	0	0	

Length		Mean	Length		Mean	Length		Mean
group (in)	#	weight (lbs)	group (in)	#	weight (lbs)	group (in)	#	weight (lbs)
1.0	7	0.00	17.5			34.0		
1.5	21	0.00	18.0			34.5		
2.0	52	0.01	18.5			35.0		
2.5	87	0.01	19.0			35.5		
3.0	41	0.02	19.5			36.0		
3.5	32	0.03	20.0			36.5		
4.0	11	0.04	20.5			37.0		
4.5	8	0.06	21.0			37.5		
5.0	22	0.08	21.5			38.0		
5.5	27	0.12	22.0			38.5		
6.0	22	0.15	22.5			39.0		
6.5	22	0.20	23.0			39.5		
7.0	6	0.23	23.5			40.0		
7.5	2	0.15	24.0			40.5		
8.0			24.5			41.0		
8.5			25.0			41.5		
9.0			25.5			42.0		
9.5			26.0			42.5		
10.0			26.5			43.0		
10.5			27.0			43.5		
11.0			27.5			44.0		
11.5			28.0			44.5		
12.0			28.5			45.0		
12.5			29.0			45.5		
13.0			29.5			46.0		
13.5			30.0			46.5		
14.0			30.5			47.0		
14.5			31.0			47.5		
15.0			31.5			48.0		
15.5			32.0			48.5		
16.0			32.5			49.0		
16.5			33.0			49.5		
17.0			33.5			50.0		

Lake:	Hominy Ridge				TN	GN	EF
Date:	6/18/2007	to	6/19/2007	Total #	2	8	90
Species:	Largemouth ba	ass		Effort	2	2	0.5
Total number:	100			CPUE	1	4	180

Total weight: 44.69 Length range: 3.7

to 15.8

Group	TL (in)	TN	GN	EF	TOTAL	RSD
Stock	8	0	6	46	52	-
Quality	12	0	2	24	26	52
Preferred	15	0	0	2	2	4
Memorable	20	0	0	0	0	
Trophy	25	0	0	0	0	

Length		Mean	Length		Mean	Length		Mean
group (in)	#	weight (lbs)	group (in)	#	weight (lbs)	group (in)	#	weight (lbs)
1.0			17.5			34.0		
1.5			18.0			34.5		
2.0			18.5			35.0		
2.5			19.0			35.5		
3.0			19.5			36.0		
3.5	2	0.03	20.0			36.5		
4.0	6	0.03	20.5			37.0		
4.5	3	0.04	21.0			37.5		
5.0	2	0.06	21.5			38.0		
5.5	5	0.08	22.0			38.5		
6.0	3	0.10	22.5			39.0		
6.5	6	0.13	23.0			39.5		
7.0	13	0.16	23.5			40.0		
7.5	8	0.20	24.0			40.5		
8.0	4	0.26	24.5			41.0		
8.5	2	0.15	25.0			41.5		
9.0	6	0.34	25.5			42.0		
9.5	2	0.46	26.0			42.5		
10.0	3	0.48	26.5			43.0		
10.5			27.0			43.5		
11.0	6	0.64	27.5			44.0		
11.5	3	0.73	28.0			44.5		
12.0	11	0.81	28.5			45.0		
12.5	5	0.95	29.0			45.5		
13.0	1	0.99	29.5			46.0		
13.5	7	1.22	30.0			46.5		
14.0			30.5			47.0		
14.5			31.0			47.5		
15.0			31.5			48.0		
15.5	2	2.08	32.0			48.5		
16.0			32.5			49.0		
16.5			33.0			49.5		
17.0			33.5			50.0		

Lake:	Hominy Ridge				TN	GN	EF
Date:	6/18/2007	to	6/19/2007	Total #	77	1	15
Species:	Redear sunfish			Effort	2	2	0.5
Total number:	93			CPUE	39	1	30
Total weight:	12.65						
Length range:	2.4	to	8.5				

Group	TL (in)	TN	GN	EF	TOTAL	RSD
Stock	4	67	1	12	80	-
Quality	7	18	0	2	20	17
Preferred	9	0	0	0	0	
Memorable	11	0	0	0	0	
Trophy	13	0	0	0	0	

Length		Mean	Length		Mean	Length		Mean
group (in)	#	weight (lbs)	group (in)	#	weight (lbs)	group (in)	#	weight (lbs)
1.0			17.5			34.0		
1.5			18.0			34.5		
2.0	1	0.01	18.5			35.0		
2.5	8	0.01	19.0			35.5		
3.0	2	0.01	19.5			36.0		
3.5	2	0.04	20.0			36.5		
4.0	2	0.05	20.5			37.0		
4.5	7	0.06	21.0			37.5		
5.0	10	0.09	21.5			38.0		
5.5	11	0.12	22.0			38.5		
6.0	14	0.16	22.5			39.0		
6.5	15	0.20	23.0			39.5		
7.0	14	0.24	23.5			40.0		
7.5	4	0.30	24.0			40.5		
8.0	1	0.00	24.5			41.0		
8.5	1	0.00	25.0			41.5		
9.0			25.5			42.0		
9.5			26.0			42.5		
10.0			26.5			43.0		
10.5			27.0			43.5		
11.0			27.5			44.0		
11.5			28.0			44.5		
12.0			28.5			45.0		
12.5			29.0			45.5		
13.0			29.5			46.0		
13.5			30.0			46.5		
14.0			30.5			47.0		
14.5			31.0			47.5		
15.0			31.5			48.0		
15.5			32.0			48.5		
16.0			32.5			49.0		
16.5			33.0			49.5		
17.0			33.5			50.0		

Lake:	Hominy Ridge				TN	GN	EF
Date:	6/18/2007	to	6/19/2007	Total #	30	4	1
Species:	Black crappie			Effort	2	2	0.5
Total number:	35			CPUE	15	2	2
Total weight:	12.04						
Length range:	7.1	to	13.3				

Group	TL (in)	TN	GN	EF	TOTAL	RSD
Stock	5	30	4	1	35	-
Quality	8	23	3	1	27	100
Preferred	10	7	1	1	9	100
Memorable	12	1	0	0	1	
Trophy	15	0	0	0	0	

Length		Mean	Length		Mean	Length		Mean
group (in)	#	weight (lbs)	group (in)	#	weight (lbs)	group (in)	#	weight (lbs)
1.0			17.5			34.0		
1.5			18.0			34.5		
2.0			18.5			35.0		
2.5			19.0			35.5		
3.0			19.5			36.0		
3.5			20.0			36.5		
4.0			20.5			37.0		
4.5			21.0			37.5		
5.0			21.5			38.0		
5.5			22.0			38.5		
6.0			22.5			39.0		
6.5			23.0			39.5		
7.0	4	0.20	23.5			40.0		
7.5	4	0.21	24.0			40.5		
8.0	3	0.27	24.5			41.0		
8.5	8	0.30	25.0			41.5		
9.0	4	0.35	25.5			42.0		
9.5	3	0.38	26.0			42.5		
10.0	6	0.48	26.5			43.0		
10.5	1	0.63	27.0			43.5		
11.0	1	0.00	27.5			44.0		
11.5			28.0			44.5		
12.0			28.5			45.0		
12.5			29.0			45.5		
13.0	1	1.14	29.5			46.0		
13.5			30.0			46.5		
14.0			30.5			47.0		
14.5			31.0			47.5		
15.0			31.5			48.0		
15.5			32.0			48.5		
16.0			32.5			49.0		
16.5			33.0			49.5		
17.0			33.5			50.0		

Back-calculated lengths-at-age for bluegills captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

		Age							
Year Class	# Aged	I	II	III	IV	V	VI	VII	
2005	11	1.6	2.7						
	SD	0.2	0.5						
2004	10	1.5	2.3	3.3					
	SD	0.2	0.2	0.5					
2003	13	1.5	2.5	3.5	4.9				
	SD	0.2	0.4	0.6	0.7				
2002	16	1.4	2.1	3.3	4.5	5.6			
	SD	0.2	0.4	0.7	0.8	0.9			
2001	3	1.4	2.3	3.5	5.5	6.8	7.2		
	SD	0.1	0.3	0.1	0.2	0.2	0.4		
2000	1	1.3	1.8	2.4	3.8	5.0	5.8	6.1	
	SD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Mean*		1.5	2.4	3.4	5.0	6.2	7.2		
SD		0.2	0.4	0.5	0.6	0.5	0.4		

<sup>\*</sup>Does not include age groups with less than three samples.

Age-length key for bluegills captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

Length	# in	# (age) in				Age			
Group	sample	subsample	1	2	3	4	5	6	7
1.0	7								
1.5	21								
2.0	52								
2.5	87	3(2), 1(3)		65	22				
3.0	41	2(2), 1(3)		27	14				
3.5	32	4(2), 2(3)		21	11				
4.0	11	2(2), 3(3)		4	7				
4.5	8	3(3), 1(4)			6	2			
5.0	22	7(4), 3(5)				15	7		
5.5	27	3(4), 1(5)				20	7		
6.0	22	1(4), 4(5), 1(7)				4	14		4
6.5	22	1(4), 6(5)				3	19		
7.0	6	2(5), 1(6)					4	2	
7.5	2	2(6)						2	
Mean TL				3.1	3.4	5.6	6.3	7.5	6.3
SE				0.04	0.09	0.07	0.08	0.14	0.00

Back-calculated lengths-at-age for largemouth bass captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

					Age			
Year Class	# Aged	I	II	III	IV	V	VI	VII
2006	9	3.5						
	SD	0.3						
2005	23	3.4	5.6					
	SD	0.5	0.8					
2004	16	2.6	5.7	8.2				
	SD	0.6	0.7	1.1				
2003	15	3.6	6.6	9.0	11.1			
	SD	0.5	0.4	0.6	0.7			
2002	9	3.4	5.9	8.5	10.7	12.0		
	SD	0.8	1.3	1.2	1.1	1.0		
2001	0	0.0	0.0	0.0	0.0	0.0	0.0	
	SD	0.0	0.0	0.0	0.0	0.0	0.0	
2000	1	3.3	7.2	10.0	12.2	13.2	14.5	15.2
	SD	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean*		3.3	5.9	8.6	10.9	12.0	0.0	0.0
SD		0.6	0.8	1.0	0.9	1.0	0.0	0.0

<sup>\*</sup>Does not include age groups with less than three samples.

Age-length key for largemouth bass captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

Length	# in	# (age) in		Ž		Age			
Group	sample	subsample	1	2	3	4	5	6	7
3.5	2	1(1)	2						
4.0	6	6(1)	6						
4.5	3	2(1), 1(2)	2	1					
5.0	2	2(2)		2					
5.5	5	5(2)		5					
6.0	3	3(2)		3					
6.5	6	4(2), 1(3)		5	1				
7.0	13	4(2)		13					
7.5	8	4(2)		8					
8.0	4	3(3)			4				
8.5	2	1(3)			2				
9.0	6	5(3)			6				
9.5	2	2(3)			2				
10.0	3	3(3)			3				
10.5									
11.0	6	1(3), 4(4)			1	5 3			
11.5	3	2(4)							
12.0	11	4(4), 2(5)				7	4		
12.5	5	3(4), 2(5)				3	2		
13.0	1	1(4)				1			
13.5	7	1(4), 5(5)				1	6		
14.0									
14.5									
15.0									
15.5	2	1(7)							2
Mean TL			4.3	6.8	9.2	12.1	13.1		15.8
SE			0.11	0.14	0.24	0.16	0.21		0.00

Back-calculated lengths-at-age for redear sunfish captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

		Age						
Year Class	# Aged	I	II	III	IV	V	VI	VII
2005	9	1.5	2.4					
	SD	0.2	0.4					
2004	25	1.7	3.2	4.7				
	SD	0.2	0.4	0.8				
2003	4	1.7	3.1	5.1	6.2			
	SD	0.3	0.7	0.3	0.4			
2002	10	1.6	2.7	4.7	6.2	6.9		
	SD	0.2	0.3	0.4	0.6	0.5		
2001	0	0.0	0.0	0.0	0.0	0.0	0.0	
	SD	0.0	0.0	0.0	0.0	0.0	0.0	
2000	1	1.3	2.9	3.8	6.6	7.6	8.0	8.3
	SD	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean*		1.6	2.9	4.8	6.2	6.9		
SD		0.2	0.5	0.5	0.5	0.5		

<sup>\*</sup>Does not include age groups with less than three samples.

Age-length key for redear sunfish captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

						,		
# in	# (age) in				Age			
sample	subsample	1	2	3	4	5	6	7
1	1(2)		1					
8	6(2)		8					
2	1(2)		2					
2	1(2)		2					
3	3(3)			3				
7	5(3)			7				
10	5(3)			10				
11	6(3)			11				
14	5(3), 1(4)			12	2			
15	1(3), 2(4), 2(5)			3	6	6		
14	1(4), 4(5)				3	11		
4	3(5)					4		
1	1(5)					1		
1	1(7)							1
			2.9	5.6	6.8	7.3		8.8
			0.12	0.10	0.11	0.09		
	sample  1 8 2 2 3 7 10 11 14 15 14 4 1	sample         subsample           1         1(2)           8         6(2)           2         1(2)           2         1(2)           3         3(3)           7         5(3)           10         5(3)           11         6(3)           14         5(3), 1(4)           15         1(3), 2(4), 2(5)           14         1(4), 4(5)           4         3(5)           1         1(5)	sample         subsample         1           1         1(2)           8         6(2)           2         1(2)           2         1(2)           3         3(3)           7         5(3)           10         5(3)           11         6(3)           14         5(3), 1(4)           15         1(3), 2(4), 2(5)           14         1(4), 4(5)           4         3(5)           1         1(5)	sample         subsample         1         2           1         1(2)         1           8         6(2)         8           2         1(2)         2           2         1(2)         2           3         3(3)         3(3)           7         5(3)         10           10         5(3)         11           6(3)         14         5(3), 1(4)           15         1(3), 2(4), 2(5)         14           14         1(4), 4(5)         4           4         3(5)         1           1         1(5)         1           1         1(7)         2.9	sample         subsample         1         2         3           1         1(2)         1         8         6(2)         8         2         1(2)         2         2         2         2         2         2         2         2         3         3         3         3         7         5(3)         7         7         10         5(3)         10         10         11         6(3)         11         11         14         5(3), 1(4)         12         12         15         13), 2(4), 2(5)         3         3         14         1(4), 4(5)         3         14         1(4), 4(5)         4         3(5)         3         1         1         1(5)         1         1(7)         2.9         5.6	sample         subsample         1         2         3         4           1         1(2)         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	sample         subsample         1         2         3         4         5           1         1(2)         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	sample         subsample         1         2         3         4         5         6           1         1(2)         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1

Back-calculated lengths-at-age for black crappie captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

		Age					
Year Class	# Aged	I	II	III	IV	V	
2005	7	3.3	6.4				
	SD	0.4	0.5				
2004	20	3.2	6.1	8.3			
	SD	0.5	0.8	0.7			
2003	5	3.2	6.2	8.5	9.7		
	SD	0.2	1.2	1.0	0.3		
2002	2	2.3	5.7	8.3	10.2	11.7	
	SD	0.1	2.2	0.7	0.4	0.9	
Mean*		3.2	6.2	8.4	9.7	0.0	
SD		0.4	0.8	0.9	0.3	0.0	

<sup>\*</sup>Does not include age groups with less than three samples.

Age-length key for black crappie captured at Hominy Ridge Lake, Wabash County, Indiana in June 2007.

Length	# in	# (age) in			Age		
Group	sample	subsample	1	2	3	4	5
7.0	4	3(2), 1(3)		3	1		
7.5	4	4(2)		4			
8.0	3	3(3)			3		
8.5	8	8(3)			8		
9.0	4	4(3)			4		
9.5	3	1(3), 2(4)			1	2	
10.0	6	2(3), 3(4)			2	4	
10.5	1	1(3)			1		
11.0	1	1(5)					1
11.5							
12.0							
12.5							
13.0	1	1(5)					1
Mean TL				7.5	9.0	10.1	12.3
SE				0.10	0.18	0.11	1.00

Locations of gill nets, trap nets, and electrofishing transects on Hominy Ridge Lake, 2007.

		Gi	ill Nets	
1	N	40.80841541	W	-85.68630525
2	N	40.80751419	W	-85.68404146
		Tra	ap Nets	
1	N	40.80816329	W	-85.68701872
2	N	40.80735326	W	-85.68353721
		Elect	trofishi	ng
1	N	40.8089143	W	-85.68407365
	N	40.80836713	W	-85.68658956
2	N	40.80795407	W	-85.68439015
	N	40.807423	W	-85.68359085